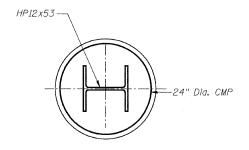
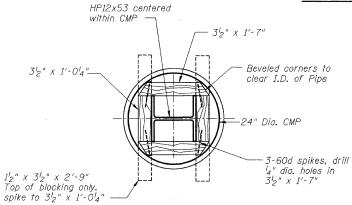


DETAIL 1



SECTION A-A



BILL OF MATERIAL

Item	Unit	Total
Furnishing Steel Piles, HP12x53	Foot	1,848
Driving Piles	Foot	1,848
Test Pile Steel, HP12x53	Each	1
Pile Casing, CMP, 24" Dia.	Foot	610

CMP BLOCKING DETAIL

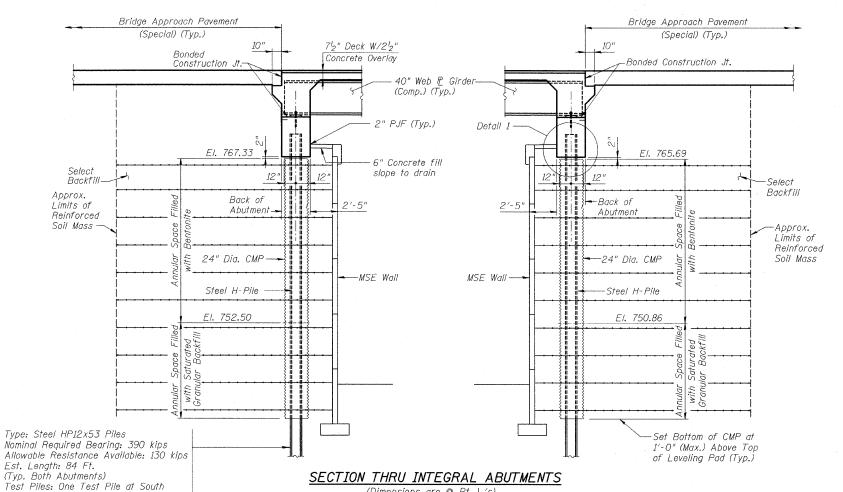
One required at top and bottom of CMP. Bottom blocking shall be treated material and shall remain in place. Top blocking shall be removed prior to backfilling inside the CMP. Cost for this work shall be included in the price bid for Pile Casing, CMP, 24" Dia.

HDR Engineering, Inc.

PI	LE	AND	CMP	DET	AILS

RAWN	JM	SHEET NO.
HECKED	VEVS	
PPROVED	BSK	
ATE	06/04/2008	3-22
CALE	NONE	7

CITY OF WHEATON MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD



(Dimensions are @ Rt. L's)

Notes:

Abutment.

- 1. Annular space between H-Pile and CMP to be first partially filled with saturated granular backfill to an elevation 15'-0" below the pile cap and then filled to the top of the CMP with bentonite.
- Provide a 2" gap between the bottom of the pile cap and the top of the CMP to allow independent movement of the piles within the CMP.
- 3. Pile Casing, CMP, 24" Dia. Pay item includes all costs for furnishing and placing CMP, Blocking Material, Bentonite Fill and Saturated Granular Backfill at both abutments. Length based on CMP extending from 2" below the bottom of the abutment to the top of the MSE Wall leveling pad. The CMP shall meet the requirements for CMP entrance under 23 feet of fill. The bentonite slurry shall be as according to the Special Provisions.
- 4. Blocking at the top of the CMP is required to maintain position of CMP casings during the MSE Wall placement,
- 5. See Retaining Wall Drawings for soil reinforcement and panel details.
- 6. The Steel H-piles shall be according to AASHTO M270 Grade 50.
- 7. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.